VOLUME 50 · CONTENTS

No 1 JANUARY 1993 Page

Editorials

1 *The British Journal of Industrial Medicine:* 50 years on

5 Donald Hunter 1898–1978: Editor BJIM 1944–50 *Richard Schilling*

Editors choice

7 Chronic carbon tetrachloride intoxication (*Br J Ind Med* 1944;1:11–9) *Alice Stewart, L J Witts*

Papers

17 Markers of early renal changes induced by industrial pollutants. I Application to workers exposed to mercury vapour *A Cárdenas, H Roels, A M Bernard, R Barbon, J P Buchet, R R Lauwerys, J Roselló, G Hotter, A Mutti, I Franchini, L M Fels, H Stolte, M E De Broe, G D Nuyts, S A Taylor, R G Price*

28 Markers of early renal changes induced by industrial pollutants. II Application to workers exposed to lead *A Cárdenas, H Roels, A M Bernard, R Barbon, J P Buchet, R R Lauwerys, J Roselló, I Ramis, A Mutti, I Franchini, L M Fels, H Stolte, M E De Broe, G D Nuyts, S A Taylor, R G Price*

37 Markers of early renal changes induced by industrial pollutants. III Application to workers exposed to cadmium *H Roels, A M Bernard, A Cárdenas, J P Buchet, R R Lauwerys, G Hotter, I Ramis, A Mutti, I Franchini, I Bundschuh, H Stolte, M E De Broe, G D Nuyts, S A Taylor, R G Price*

49 Evaluation of δ-aminolaevulinic acid in blood of workers exposed to lead *Toru Takebayashi, Kazuyuki Omae, Kanae Hosoda, Toshihiko Satoh, Tsutahiro Hamaguchi, Haruhiko Sakurai*

55 Toxicokinetics of toluene and urinary excretion of hippuric acid after human exposure to $^2H_8$-toluene *A Löf, E Wigaeus Hjelm, A Colmsjö, B-O Lundmark, Å Norström, A Sato*

60 Toluene diisocyanate induced asthma: outcome according to persistence or cessation of exposure *Giorgio Pisati, Adriana Baruffini, Sergio Zedda*

65 Asthma, rhinitis, and dermatitis in workers exposed to reactive dyes *Ralph Nilsson, Rolf Nordlinder, Urban Wass, Birgitta Meding, Lars Belin*

71 Exposure to ethylene glycol ethers and spermatogenic disorders in man: a case control study *H Veulemans, O Steeno, R Masschelein, D Groeseneken*

79 Non-Hodgkin's lymphoma and occupation in Sweden: a registry based analysis *Martha S Linet, Hans S R Malker, Joseph K McLaughlin, Jan A Weiner, William J Blot, Jan L E Ericsson, Joseph F Fraumeni Jr*

85 Incidence of lung cancer by histological type among asbestos cement workers in Denmark *Edith Raff, Elsebeth Lynge, Bente Korsgaard*

90 Production of interleukin 1 by rat pleural leucocytes in culture after intratracheal instillation of crocidolite asbestos *Xiao Yang Li, David Lamb, Kenneth Donaldson*

Correspondence

95 Asbestos and cancer: history and public policy *Morris Greenberg*

95 Notices

No 2 FEBRUARY 1993

Editor's choice

97 Chronic mercury poisoning (*Br J Ind Med* 1946;3:55–63) *Monamy Buckell, Donald Hunter, Reginald Milton, Kenneth M A Perry*

Papers

107 An assessment of exposure to glutaraldehyde in hospitals: typical exposure levels and recommended control measures *P Leinster, J M Baum, P J Baxter*

VOLUME 50 · CONTENTS

No 1 JANUARY 1993 Page

Editorials

1 *The British Journal of Industrial Medicine:* 50 years on

5 Donald Hunter 1898–1978: Editor BJIM 1944–50 *Richard Schilling*

Editors choice

7 Chronic carbon tetrachloride intoxication (*Br J Ind Med* 1944;1:11–9) *Alice Stewart, L J Witts*

Papers

17 Markers of early renal changes induced by industrial pollutants. I Application to workers exposed to mercury vapour *A Cárdenas, H Roels, A M Bernard, R Barbon, J P Buchet, R R Lauwerys, J Roselló, G Hotter, A Mutti, I Franchini, L M Fels, H Stolte, M E De Broe, G D Nuyts, S A Taylor, R G Price*

28 Markers of early renal changes induced by industrial pollutants. II Application to workers exposed to lead *A Cárdenas, H Roels, A M Bernard, R Barbon, J P Buchet, R R Lauwerys, J Roselló, I Ramis, A Mutti, I Franchini, L M Fels, H Stolte, M E De Broe, G D Nuyts, S A Taylor, R G Price*

37 Markers of early renal changes induced by industrial pollutants. III Application to workers exposed to cadmium *H Roels, A M Bernard, A Cárdenas, J P Buchet, R R Lauwerys, G Hotter, I Ramis, A Mutti, I Franchini, I Bundschuh, H Stolte, M E De Broe, G D Nuyts, S A Taylor, R G Price*

49 Evaluation of δ-aminolaevulinic acid in blood of workers exposed to lead *Toru Takebayashi, Kazuyuki Omae, Kanae Hosoda, Toshihiko Satoh, Tsutahiro Hamaguchi, Haruhiko Sakurai*

55 Toxicokinetics of toluene and urinary excretion of hippuric acid after human exposure to $^2H_8$-toluene *A Löf, E Wigaeus Hjelm, A Colmsjö, B-O Lundmark, Å Norström, A Sato*

60 Toluene diisocyanate induced asthma: outcome according to persistence or cessation of exposure *Giorgio Pisati, Adriana Baruffini, Sergio Zedda*

65 Asthma, rhinitis, and dermatitis in workers exposed to reactive dyes *Ralph Nilsson, Rolf Nordlinder, Urban Wass, Birgitta Meding, Lars Belin*

71 Exposure to ethylene glycol ethers and spermatogenic disorders in man: a case control study *H Veulemans, O Steeno, R Masschelein, D Groeseneken*

79 Non-Hodgkin's lymphoma and occupation in Sweden: a registry based analysis *Martha S Linet, Hans S R Malker, Joseph K McLaughlin, Jan A Weiner, William J Blot, Jan L E Ericsson, Joseph F Fraumeni Jr*

85 Incidence of lung cancer by histological type among asbestos cement workers in Denmark *Edith Raff, Elsebeth Lynge, Bente Korsgaard*

90 Production of interleukin 1 by rat pleural leucocytes in culture after intratracheal instillation of crocidolite asbestos *Xiao Yang Li, David Lamb, Kenneth Donaldson*

Correspondence

95 Asbestos and cancer: history and public policy *Morris Greenberg*

95 Notices

No 2 FEBRUARY 1993

Editor's choice

97 Chronic mercury poisoning (*Br J Ind Med* 1946;3:55–63) *Monamy Buckell, Donald Hunter, Reginald Milton, Kenneth M A Perry*

Papers

107 An assessment of exposure to glutaraldehyde in hospitals: typical exposure levels and recommended control measures *P Leinster, J M Baum, P J Baxter*

112 Comprehensive health evaluation of workers in the ceramics industry *Jian Huang, Eiji Shibata, Yasuhiro Takeuchi, Hirotoshi Okutani*

117 Mortality from stomach cancer in Ontario miners *R A Kusiak, A C Ritchie, J Springer, J Muller*

127 Mortality in retired coke oven plant workers *N Chau, J P Bertrand, J M Mur, A Figueredo, A Patris, J J Moulin, Q T Pham*

136 Effect of occupational air pollutants on various histological types of lung cancer: a population based case-control study *H Becher, W Jedrychowski, J Wahrendorf, Z Basa-Cierpialek, E Flak, K Gomola*

143 Chemical exposures and respiratory cancer among Finnish woodworkers *T P Kauppinen, T J Partanen, S G Hernberg, J I Nickels, R A Luukkonen, T R Hakulinen, E I Pukkala*

149 Sister chromatid exchanges in lymphocytes of petroleum retailers *J W Edwards, B G Priestly*

155 Systemic effects of inhalational methyl bromide poisoning: a study of nine cases occupationally exposed due to inadvertent spread during fumigation *W N M Hustinx, R T H van de Laar, A C van Huffelen, J C Verwey, J Meulenbelt, T J F Savelkoul*

160 An investigation into the acute vascular effects of riveting *Kathleen M McKenna, S McGrann, A D Blann, Judith A Allen*

167 Effects of phosphorylation of chrysotile on pleuropulmonary fibrogenicity and carcinogenicity *H Daniel, A Wastiaux, P Sébastien, P Bégin*

172 Long term effects of alumina on components of bronchoalveolar lavage fluid from rats *Göran Tornling, Eleonora Blaschke, Anders Eklund*

176 Distribution of radioactivity from ^{14}C-formaldehyde in pregnant mice and their fetuses *Yohko Katakura, Reiko Kishi, Toyo Okui, Toshiko Ikeda, Hirotsugu Miyake*

183 Lymphocyte B and T cell subsets in peripheral blood from patients with asbestosis *Peng Liming, Wang Xun*

Short report

185 The immune system as target for subclinical lead related toxicity *Alf Fischbein, Peter Tsang, Jiin-Chyuan J Luo, J George Bekesi*

Forum

187 The need for standardised testing procedures for all products capable of liberating respirable fibres: the example of materials based on cellulose *J M G Davis*

Correspondence

191 Haemolytic anaemia in a case of occupational asthma due to maleic anhydride *John Jackson, Alun H Jones*

192 Notices

No 3 MARCH 1993

Editor's choice

193 The care of the lead worker (*Br J Ind Med* 1949;6:125–143) *Ronald E Lane*

Papers

213 Occupational asthma and extrinsic alveolitis due to isocyanates: current status and perspectives *Olivier Vandenplas, Jean-Luc Malo, Marina Saetta, Christina E Mapp, Leonardo M Fabbri*

229 Latency of the Achilles tendon reflex for detection of reduced functions of the peripheral nervous system in workers exposed to lead *Yasutaka Ogawa, Mamoru Hirata, Akira Okayama, Yoko Endo Ichikawa, Shigeru Goto*

234 A mortality study among mild steel and stainless steel welders *Jean J Moulin, Pascal Wild, Jean M Haguenoer, Dominique Faucon, Régis De Gaudemaris, Jean M Mur, Mathieu Mereau, Yves Gary, Jean P Toamain, Yves Birembaut, Marcel Blanc, Marie P Debiolles, Dominique Jegaden, Bernard Laterrière, Martine Léonard, François Marini, Christian Massardier, Martine Moulin, Michèle Reure, Lionel Rigal, Gérard Robert, Michel Viossat*

244 Relation between various chromium compounds and some other elements in fumes from manual metal arc stainless steel welding *Wanda Matczak, Jadwiga Chmielnicka*

252 Lung function in insulation workers *Jesper Clausen, Bo Netterstrøm, Christine Wolff*

257 An epidemiological study of the health of Sri Lankan tea plantation workers associated with long term exposure to paraquat *N Senanayake, G Gurunathan, T B Hart, P Amerasinghe, M Babapulle, S B Ellapola, M Udupihille, V Basanayake*

264 Mortality and cancer morbidity among cement workers *K Jakobsson, V Horstmann, H Welinder*

273 Use of chest radiographs in epidemiological investigations of pneumoconioses *Karen B Mulloy, David B Coultas, Jonathan M Samet*

276 Occupational exposure to organic solvents as a cause of sleep apnoea *Christer Edling, Arne Lindberg, Jan Ulfberg*

280 Circadian variations of acute toxicity and blood and brain concentrations of inhaled toluene in rats *J Harabuchi, R Kishi, T Ikeda, H Kiyosawa, H Miyake*

Correspondence

287 Inhalation fever: a proposed unifying term for febrile reactions to inhalation of noxious substances *David S Pratt, Anna Rask-Andersen*

287 A case-control study of malignant and non-malignant disease among employees of a fibreglass manufacturing facility *Franklin E Mirer, Robert M Park*

288 Notice

No 4 APRIL 1993

Editor's choice

289 Skin cancer in the engineering industry from the use of mineral oil (*Br J Ind Med* 1950;7:1–11) *C N D Cruickshank, J R Squire*

Papers

301 Verification of effects on the nervous system of low level occupational exposure to CS_2 *Marc W M M Ruijten, Herman J A Sallé, Maarten M Verberk*

308 An epidemiological study of workers potentially exposed to ethylene oxide *Otto Wong, Lisa S Trent*

317 Cancer mortality in ethylene oxide workers *L Bisanti, M Maggini, R Raschetti, S Spila Alegiani, F Menniti Ippolito, B Caffari, N Segnan, A Ponti*

325 Evoked potentials and cerebral blood flow in solvent induced psycho-organic syndrome *D Deschamps, R Garnier, F Lille, Y Tran Dinh, L Bertaux, A Reygagne, S Dally*

331 Effects of exposure to low concentrations of chlorinated hydrocarbons on the kidney and liver of industrial workers *P J Boogaard, P S J Rocchi, N J van Sittert*

340 A review of potential human carcinogenicity of the chlorophenoxy herbicides MCPA, MCPP, and 2,4-DP *G G Bond, R Rossbacher*

349 Risk factors for kidney cancer in New South Wales. IV. Occupation *Margaret McCredie, J H Stewart*

355 Absence of amosite asbestos in airway mucosa of non-smoking long term workers with occupational exposure to asbestos *Andrew Churg, B Stevens*

360 Temporary threshold shifts in fingertip vibratory sensation from hand-transmitted vibration and repetitive shock *S Maeda, M J Griffin*

368 Neuropsychological performance and solvent exposure among car body repair shop workers *William Daniell, Arlene Stebbins, James O'Donnell, Sanford W Horstman, Linda Rosenstock*

Short report

378 Haemolysis of human erythrocytes by pentachlorophenol and its suppression by albumin *Hideki Igisu*

Correspondence

380 A potential cause of bladder cancer *W J King*

Objective testing for vasospasm in the hand-arm vibration syndrome *R G Lewin-Smith*

Pulmonary effects of exposure to fine fibreglass: irregular opacities and small airways obstruction *Joel R Bender*
Pulmonary effects of exposure to fine fibreglass: irregular opacities and small airways obstruction *Charles E Rossiter*
384 Notice

No 5 MAY 1993

Editorial
385 Low back pain in the workplace: attainable benefits not attained *Walter O Spitzer*

Editor's choice
389 Tumours of the urinary bladder in workmen engaged in the manufacture and use of certain dyestuff intermediates in the British chemical industry part I. The role of aniline, benzidine, alpha-naphthylamine, and beta-naphthylamine (*Br J Ind Med* 1954;11:75–104) *R A M Case, Marjorie E Hosker, Drever B McDonald, Joan T Pearson*

Meeting report
412 Biological indicators and their clinical significance in persons exposed to mineral fibres: report of a workshop held in Japan, 24–25 November 1991

Papers
418 A University's contribution to occupational health *R S F Schilling*
422 Pre-employment lung function at age 16 years as a guide to lung function in adult life *D J Chinn, J E Cotes, M Fechner, C Elliott*
428 Prevalence of small opacities in chest radiographs of nickel sinter plant workers *D C F Muir, J Julian, N Jadon, R Roberts, J Roos, J Chan, W Maehle, W K C Morgan*
432 Occupational exposure to dust and lung disease among sheet metal workers *Katherine L Hunting, Laura S Welch*
443 Respiratory symptoms, lung function, and pneumoconiosis among self employed dental technicians *D Choudat, S Triem, B Weill, C Vicrey, J Ameille, P Brochard, M Letourneux, C Rossignol*
450 Mortality and incidence of cancer in a cohort of Swedish chimney sweeps: an extended follow up study *Bradley A Evanoff, Per Gustavsson, Christer Hogstedt*
460 Application of the urinary S-phenylmercapturic acid test as a biomarker for low levels of exposure to benzene in industry *N J van Sittert, P J Boogaard, G D J Beulink*
470 Acute effects of trichloroethylene on blood concentrations and performance decrements in rats and their relevance to humans *R Kishi, I Harabuchi, T Ikeda, Y Katakura, H Miyake*

No 6 JUNE 1993

Editorial
481 Future of research into occupational lung disease *Hans Weill*

Editor's choice
484 Mortality from lung cancer in asbestos workers (*Br J Ind Med* 1955;12:81–6) *Richard Doll*

Papers
491 Health, employment, and financial outcomes in workers with occupational asthma *P F G Gannon, D C Weir, A S Robertson, P Sherwood Burge*
497 Hypersensitivity pneumonitis presenting as sarcoidosis *Linda S Forst, Jerrold Abraham*
501 Mineral fibres: correlation between oxidising surface activity and DNA base hydroxylation *A Nejjari, J Fournier, H Pezerat, P Leanderson*
505 Mortality from lung cancer among copper miners *Ruoling Chen, Li Wei, Huaming Huang*
510 Manganese encephalopathy: utility of early magnetic resonance imaging *Kevin Nelson, Jan Golnick, Thomas Korn, Carol Angle*

514 High resolution pulmonary computed tomography scans quantified by analysis of density distribution: application to asbestosis *Davor Eterović, Željko Dujić, Jadranka Tocilj, Vesna Čapkun*

520 Somatosensory evoked potentials in workers exposed to toluene and styrene *I Štětkářová, P Urban, B Procházka, E Lukáš*

528 Mortality and cancer morbidity of production workers in the United Kingdom flexible polyurethane foam industry *Tom Sorahan, Debbie Pope*

537 Cancer incidence and mortality in the Swedish polyurethane foam manufacturing industry *Lars Hagmar, Hans Welinder, Zoli Mikoczy*

544 Cor pulmonale and silicosis: a necropsy based case-control study *J Murray, G Reid, D Kielkowski, M de Beer*

549 Further follow up of mortality in a United Kingdom oil refinery cohort *Lesley Rushton*

561 Further follow up of mortality in a United Kingdom oil distribution centre cohort *Lesley Rushton*

570 Exposure dependent increase in DNA single strand breaks in leucocytes from workers exposed to low concentrations of styrene *S A Solveig Walles, Christer Edling, Helena Anundi, Gunnar Johanson*

Correspondence

575 Lymphocyte subsets in subjects exposed to asbestos: changes in circulating natural killer cells *P J A Born, P F R Schins*

Smoking adjusted mortality due to asthma in a population of Swedish working women *Lars-Gunnar Hörte, Kjell Torén*

Notices

No 7 JULY 1993

Editor's choice

577 Death rates of miners and ex-miners with and without coalworker's pneumoconiosis in South Wales (*Br J Ind Med* 1956;13:102–9) *R G Carpenter, A L Cochrane, W G Clarke, G Jonathan, F Moore*

Papers

586 Mortality among workers in the diatomaceous earth industry *H Checkoway, N J Heyer, P A Demers, N E Breslow*

598 Incidence of renal stones among cadmium exposed battery workers *Lars Järup, Carl Gustaf Elinder*

603 A nine year follow up study of renal effects in workers exposed to cadmium in a zinc ore refinery *N J van Sittert, P H Ribbens, B Huisman, D Lugtenburg*

613 Residual cognitive deficits 50 years after lead poisoning during childhood *Roberta F White, Rhea Diamond, Susan Proctor, Claire Morey, Howard Hu*

623 Estimation of individual dermal and respiratory uptake of polycyclic aromatic hydrocarbons in 12 coke oven workers *Joost G M VanRooij, Monika M Bodelier-Bade, Frans J Jongeneelen*

633 Decreased glutathione content and glutathione S-transferase activity in red blood cells of coal miners with early stages of pneumoconiosis *Chris T A Evelo, Robert P Bos, Paul J A Born*

637 An improved instrument for the in vivo detection of lead in bone *C L Gordon, D R Chettle, C E Webber*

642 Melanoma and occupation: results of a case-control study in The Netherlands *P J Nelemans, R Scholte, H Groenendal, L A L M Kiemeney, F H J Rampen, D J Ruiter, A L M Verbeek*

647 Incidence of cancer among workers in a Norwegian nitrate fertiliser plant *Stein Inge Fandrem, Helge Kjuus, Aage Andersen, Even Amlie*

653 Mortality and incidence of cancer among sewage workers: a retrospective cohort study *Lennart Friis, Christer Edling, Lars Hagmar*

658 Follow up study of workers exposed to man made mineral fibres *Janet M Hughes, Robert N Jones, Henry W Glindmeyer, Yehia Y Hammad, Hans Weill*

Short report

668 Seamstress's fingers *C J M Poole*

Correspondence

670 Hexachlorophene exposure in a young patient with soft tissue sarcoma *Mark J Reasor, Mark R Montgomery*
Asbestos and cancer: history and public policy *Malcolm P I Weller*
Notice
Amendment

No 8 AUGUST 1993

Editorial

673 Mechanisms of asbestos carcinogenesis and toxicity: the amphibole hypothesis revisited *Brooke T Mossman*

Editor's choice

677 Air pollution in a city street (*Br J Ind Med* 1965;22:128–38) *R E Waller, B T Commins, P J Lawther*

Papers

689 Computed tomography in the early detection of asbestosis *Raymond Bégin, Gaston Ostiguy, Robert Filion, Neil Colman, Pierre Bertrand*

699 Angiosarcoma, porphyria cutanea tarda, and probable chloracne in a worker exposed to waste oil contaminated with 2,3,7,8-tetrachlorodibenzo-p-dioxin *Rob McConnell, Kern Anderson, William Russell, Karl E Anderson, Richard Clapp, Ellen K Silbergeld, Philip J Landrigan*

704 Mortality study of ethylene oxide workers in chemical manufacturing: a 10 year update *M J Teta, L O Benson, J N Vitale*

710 Mortality due to pancreatic and lymphopoietic cancers in chlorohydrin production workers *L O Benson, M J Teta*

717 A case-control study of malignant and non-malignant respiratory disease among employees of a fibreglass manufacturing facility. II Exposure assessment *Leonard Chiazze Jr, Deborah K Watkins, Cheryl Fryar, Joseph Kozono*

726 Changes in lung function of granite crushers exposed to moderately high silica concentrations: a 12 year follow up *P Malmberg, H Hedenström, B-M Sundblad*

732 Effect of quartz and alumina dust on generation of superoxide radicals and hydrogen peroxide by alveolar macrophages, granulocytes, and monocytes *V A Gusev, Ye V Danilovskaja, O Ye Vatolkina, O S Lomonosova, B T Velichkovsky*

736 Relation between exposure related indices and neurological and neurophysiological effects in workers previously exposed to mercury vapour *Dag G Ellingsen, Tore Mørland, Arne Andersen, Helge Kjuus*

745 Mercury and selenium in workers previously exposed to mercury vapour at a chloralkali plant *Dag G Ellingsen, Roy I Holland, Yngvar Thomassen, Marit Landro-Olstad, Wolfgang Frech, Helge Kjuus*

753 Inhalation of cobalt by sensitised guinea pigs: effects on the lungs *Per Camner, Anders Boman, Anne Johansson, Margot Lundborg, Jan E Wahlberg*

758 Incidence of cancer in persons with occupational exposure to electromagnetic fields in Denmark *Pascal Guénel, Povl Raskmark, Jørgen Bach Andersen, Elsebeth Lynge*

Correspondence

765 Sample size and power considerations to procure the required number of subjects with a certain attribute *James Lee*
Subclinical impairment of colour vision among workers exposed to styrene *Axel Muttray, Detlev Jung, Johannes Konietzko*
Incidence of lung cancer by histological type among asbestos cement workers in Denmark *Bengt Järrholm*
Nasal melanoma *M Goldoft, N Weiss, T Vaughan, J Lee*
Notice

No 9 SEPTEMBER 1993

Editor's choice

769 Mesothelioma of pleura and peritoneum following exposure to asbestos in the London area (*Br J Ind Med* 1965;22:262–9) *Muriel L Newhouse, Hilda Thompson*

Papers

779 A cohort study on mortality among wives of workers in the asbestos cement industry in Casale Monferrato, Italy *Corrado Magnani, Benedetto Terracini, Cristiana Ivaldi, Mario Botta, Paola Budel, Angelo Mancini, Roberto Zanetti*

785 The importance of lung function, non-malignant diseases associated with asbestos, and symptoms as predictors of ischaemic heart disease in shipyard workers exposed to asbestos *Åke Sandén, Bengt Järvholm, Sven Larsson*

791 The SHIELD scheme in the West Midlands Region, United Kingdom *P F G Gannon, P Sherwood Burge on behalf of the Midland Thoracic Society Research Group (J G Ayres, R B Cole, S Connellan, D Honeybourne, C F A Pantin)*

797 Toxicological investigations on silicon carbide. 1. Inhalation studies *J Bruch, B Rehn, H Song, E Gono, W Malkusch*

807 Toxicological investigations on silicon carbide. 2. In vitro cell tests and long term injection tests *J Bruch, B Rehn, W Song, E Gono, W Malkusch*

814 Decrease in mercury concentration in blood after long term exposure: a kinetic study of chloralkali workers *Gerd Sällsten, Lars Barregård, Andrejs Schütz*

822 An analysis of the reliability of self reported work histories from a cohort of workers exposed to polychlorinated biphenyls *Carl R Rosenberg*

827 A cohort study of workers exposed to formaldehyde in the British chemical industry: an update *M J Gardner, B Pannett, P D Winter, A M Cruddas*

835 Epidemiological survey of workers exposed to cobalt oxides, cobalt salts, and cobalt metal *Bert Swennen, Jean-Pierre Buchet, Dan Stănescu, Dominique Lison, Robert Lauwerys*

843 Increase in neuropsychiatric symptoms after occupational exposure to low levels of styrene *Christer Edling, Helena Anundi, Gunnar Johanson, Kenneth Nilsson*

851 Evolution of osteoarticular disorders as a function of past heavy physical work factors: longitudinal analysis of 627 retired subjects living in the Paris area *Francis Derriennic, Yuriko Iwatsubo, Christine Monfort, Bernard Cassou*

Correspondence

861 Estimation of prevalence rate ratios for cross sectional data: an example in occupational epidemiology *James Lee, K S Chia*
Chrysotile asbestos revisited *Jacques Dunnigan*
Pulmonary effects of exposure to fine fibreglass: irregular opacities and small airways obstruction *Kenneth Mentzer*

No 10 OCTOBER 1993

865 Notice

Editor's choice

865 Individual variations in sickness absence (*Br J Ind Med* 1967;24:169–77) *P J Taylor*

Papers

875 Incidence of cancer and mortality among workers exposed to mercury vapour in the Norwegian chloralkali industry *Dag G Ellingsen, Aage Andersen, Hans P Nordhagen, Jon Efskind, Helge Kjuus*

881 Assessment of renal dysfunction in workers previously exposed to mercury vapour at a chloralkali plant *Dag G Ellingsen, Lars Barregård, Per I Gaarder, Björn Hultberg, Helge Kjuus*

888 Mortality experience of employees exposed to 2-mercaptobenzothiazole at a chemical plant in Nitro, West Virginia *Marcie E Strauss, Elizabeth D Barrick, Roy M Bannister*

894 Bronchial symptoms and respiratory function in workers exposed to methylmethacrylate *T Marez, J L Edmé, C Boulenguez, P Shirali, J M Haguenoer*

898 Effect of smoking on pleural thickening in asbestos workers *Eiji Yano, Kozo Tanaka, Makoto Funaki, Kazuko Maeda, Chiaki Matsunaga, Kazue Yamaoka*

902 Radiographic abnormalities and mortality in subjects with exposure to crocidolite *Nicholas H de Klerk, A William Musk, William O C M Cookson, John J Glancy, Michael S T Hobbs*

907 Further evidence of human silica nephrotoxicity in occupationally exposed workers *Tze Pin Ng, Hock Siang Lee, Wai Hoong Phoon*

913 Analyses of the 1990 chest health survey of china clay workers *E M Rundle, E T Sugar, C J Ogle*

920 Mortality from lung cancer in Ontario uranium miners *R A Kusiak, A C Ritchie, J Muller, J Springer*

929 Longitudinal and cross sectional analyses of exposure to coal mine dust and pulmonary function in new miners *Noah S Seixas, Thomas G Robins, Michael D Attfield, Lawrence H Moulton*

938 A study of the health conditions of child workers in a small scale leather industry in Calcutta *Sampa Mitra*

941 Prevalence and risk factors for chronic bronchitis and farmer's lung in French dairy farmers *J C Dalphin, D Debieuvre, D Pernet, M F Maheu, J C Polio, B Toson, A Dubiez, E Monnet, J J Laplante, A Depierre*

945 Mental retardation and parental occupation: a study on the applicability of job exposure matrices *N Roeleveld, G A Zielhuis, F Gabreëls*

955 Synergistic effects of mineral fibres and cigarette smoke on the production of tumour necrosis factor by alveolar macrophages of rats *Yasuo Morimoto, Masamitsu Kido, Isamu Tanaka, Akihiro Fujino, Toshiaki Higashi, Yasuyuki Yokosaki*

No 11 NOVEMBER 1993

Editor's choice

961 Hazards of deep-sea fishing (*Br J Ind Med* 1971;**28**:27–35) *R S F Schilling*

Papers

971 Ethylene oxide: an assessment of the epidemiological evidence on carcinogenicity *R E Shore, M J Gardner, B Pannett*

998 Mortality study of workers employed at a plant manufacturing chemicals for the rubber industry: 1955–86 *Tom Sorahan, Debbie Pope*

1003 Incidence of cancer and exposure to toluene diisocyanate and methylene diphenyldiisocyanate: a cohort based case-referent study in the polyurethane foam manufacturing industry *Lars Hagmar, Ulf Strömberg, Hans Welinder, Zoli Mikoczy*

1008 Mortality and incidence of cancer among a cohort of self employed butchers from Geneva and their wives *E Gubéran, M Usel, L Raymond, G Fioretta*

1017 Mortality of iron miners in Lorraine (France): relations between lung function and respiratory symptoms and subsequent mortality *N Chau, L Benamghar, Q T Pham, D Teculescu, E Rebstock, J M Mur*

1032 Analysis of ferruginous bodies in bronchoalveolar lavage from foundry workers *Ronald F Dodson, Michael O'Sullivan, Carolyn J Corn, Joe G N Garcia, James M Stocks, David E Griffith*

1039 Study of occupational lung cancer in asbestos factories in China *Zhu Huilan, Wang Zhiming*

1043 Contact allergens in registered cleaning agents for industrial and household use *Mari-Ann Flyvholm*

Forum

1051 Coalmining, emphysema, and compensation revisited *W K C Morgan*
Reply *A Seaton*

Correspondence

1054 Pulmonary effects of exposure to fine fibreglass: irregular opacities and small airways obstruction *William Weiss*

Toluene diisocyanate induced asthma: outcome according to persistence or cessation of exposure *Gary M Liss, Susan M Tarlo*

Semen quality in welders exposed to radiant heat *Lawrence W Raymond*

Notices

No 12 DECEMBER 1993

Notice

1057 Change of title to *Occupational and Environmental Medicine*

Editor's choice

1058 Dust exposure and mortality in chrysotile mining, 1910–75 (*Br J Ind Med* 1980;37:11–24) *J C McDonald, F D K Liddle, G W Gibbs, G E Eyssen, A D McDonald*

Papers

1073 The 1891–1920 birth cohort of Quebec chrysotile miners and millers: mortality 1976–88 *J C McDonald, F D K Liddell, A Dufresne, A D McDonald*

1082 Respiratory health effects of carbon black: a survey of European carbon black workers *Kerry Gardiner, Nicholas W Trethowan, Malcolm J Harrington, Charles E Rossiter, Ian A Calvert*

1097 Incidence of cancer among welders of mild steel and other shipyard workers *Tor Erik Danielsen, Sverre Langård, Aage Andersen, Øistein Knudsen*

1104 Serum laminin, hydrocarbon exposure, and glomerular damage *P Hotz, N Thielemans, A Bernard, F Gutzwiller, R Lauwerys*

1111 Biological monitoring of occupational exposure to toluene diisocyanate: measurement of toluenediamine in hydrolysed urine and plasma by gas chromatography-mass spectrometry *Pernilla Persson, Marianne Dalene, Gunnar Skarping, Mikael Adamsson, Lars Hagmar*

1119 Plumboporphyria (ALAD deficiency) in a lead worker: a scenario for potential diagnostic confusion *J Dyer, D P Garrick, A Inglis, I F Pye*

Forum

1122 Bias *D C F Muir*

Misconceptions about blood lead concentrations *Tihomil Beritić*

Correspondence

1125 An epidemiological study of workers potentially exposed to ethylene oxide *Kyle Steenland, Leslie Stayner*

Neuropsychological performance and solvent exposure among car body repair shop workers *Peter M Eller*

1128 Index to Volume 50